

DERWENT-ACC-NO: 1994-168905

DERWENT-WEEK: 199617

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TITLE: Tripolar protection module with fusible short-circuit  
links for overvoltage protection of telephone line - uses  
breakover device that limits overvoltages and heats  
fusible link that releases contacts to bridge breakover  
device

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PATENT-ASSIGNEE: ALCATEL CABLE INTERFACE[ALCAN], MARS-ACTEL  
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PRIORITY-DATA: 1992FR-0011824 (October 6, 1992)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 592295 A1	April 13, 1994	F	008	H01T 001/14
DE 69301519 E	March 21, 1996	N/A	000	H01T 001/14
FR 2696581 A1	April 8, 1994	N/A	000	H01H 085/08
EP 592295 B1	February 7, 1996	F	010	H01T 001/14

DESIGNATED-STATES: BE DE FR GB IT SE BE DE GB IT SE

CITED-DOCUMENTS: EP 312729; FR 2659504

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
EP 592295A1	N/A	1993EP-0402430	October 4, 1993
DE 69301519E	N/A	1993DE-0601519	October 4, 1993
DE 69301519E	N/A	1993EP-0402430	October 4, 1993
DE 69301519E	Based on	EP 592295	N/A
FR 2696581A1	N/A	1992FR-0011824	October 6, 1992
<u>EP 592295B1</u>	N/A	1993EP-0402430	October 4, 1993

INT-CL (IPC): H01H085/08, H01H085/44 , H01T001/14 , H05K005/02

ABSTRACTED-PUB-NO: EP 592295A

**BASIC-ABSTRACT:**

The protection module has a tripolar breakover device (1) mounted in a box (2) with an associated fusible short-circuiting mechanism (4). The fusible element normally holds spring blades (40) extending from an earth contact (6) apart from contacts (9) that connect to the electrodes of the breakover device. Operation of the breakover device generates heat that will in time melt the fusible element, allowing the earthing contacts to spring against the other contacts.

The fusible element is in the form of a tongue that clips the breakover device onto the inside of the cover (7) that closes the box (2).

USE/ADVANTAGE - Quick mounting with accurate positioning of breakover devices fitted to enclosures for overvoltage protection of telephone lines.

ABSTRACTED-PUB-NO: EP 592295B

**EQUIVALENT-ABSTRACTS:**

Three-pole protection module with short-circuit fuse including: a three-pole protector (1) having two electrodes and an earth pole mounted in a housing (3) defined on the bottom wall of a box unit (2) and closed by a lid (7), connecting contacts (5,9) and an earth contact (6) retained or received on said box unit, for connecting said electrodes (10) of the protector in place in the box unit to a pair of lines to be protected and for connecting the earth pole (11) to an external earth, a pair of elastic branches (40) electrically connected to said earth contact (6), lying in said housing and being urged towards but isolated from said connecting contacts by said fuse (8) disposed between them and said protector when in place and relaxed and therefore coupled to said connecting contacts as a result of overheating of the protector and softening of said fuse resulting therefrom, characterised in that said fuse (8) is a fusible tongue fastened to said lid (7), mounting and retaining said protector (1) between it and the lid (7), and pressed against said pair of elastic branches (41) when the protector (1) is fitted into said housing (3) with simultaneous closure of said housing by said lid.

CHOSEN-DRAWING: Dwg. 1/6 Dwg. 1/6

TITLE-TERMS: TRIPOLAR PROTECT MODULE FUSE SHORT CIRCUIT LINK  
OVERVOLTAGE

PROTECT TELEPHONE LINE DEVICE LIMIT OVERVOLTAGE HEAT  
FUSE LINK

RELEASE CONTACT BRIDGE DEVICE

DERWENT-CLASS: U24 W01 X12 X13

EPI-CODES: U24-F02; W01-C08A; X12-F01A; X13-D01;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N1994-132993

L Number	Hits	Search Text	DB	Time stamp
1	4785	(overvoltage or failsafe) same protect\$4	USPAT	2003/08/22 15:33
2	952606	spring or conductive	USPAT	2003/08/22 15:33
3	615	((overvoltage or failsafe) same protect\$4) same (spring or conductive)	USPAT	2003/08/22 15:20
4	778827	heat	USPAT	2003/08/22 15:33
5	75	((overvoltage or failsafe) same protect\$4) same (spring or conductive)) same heat	USPAT	2003/08/22 15:21
6	1830	reed adj relay	USPAT	2003/08/22 15:21
7	0	((overvoltage or failsafe) same protect\$4) same (spring or conductive)) same heat) and (reed adj relay)	USPAT	2003/08/22 15:21
8	0	((overvoltage or failsafe) same protect\$4) same (spring or conductive)) and (reed adj relay)	USPAT	2003/08/22 15:25
9	45812	(telephone or phone) with line	USPAT	2003/08/22 15:34
10	26	((overvoltage or failsafe) same protect\$4) same (spring or conductive)) same heat) and ((telephone or phone) with line)	USPAT	2003/08/22 15:26
11	6179	(overvoltage or failsafe) same protect\$4	EPO; JPO; DERWENT; IBM_TDB	2003/08/22 15:33
12	1128753	spring or conductive	EPO; JPO; DERWENT; IBM_TDB	2003/08/22 15:33
13	1618814	heat	EPO; JPO; DERWENT; IBM_TDB	2003/08/22 15:34
14	1214005	((telephone or phone) with line) or (tip or ring)	EPO; JPO; DERWENT; IBM_TDB	2003/08/22 15:37
15	11	((overvoltage or failsafe) same protect\$4) and (spring or conductive) and heat and ((telephone or phone) with line) or (tip or ring))	EPO; JPO; DERWENT; IBM_TDB	2003/08/22 15:37